# USB ISP Tool User Guide
# Ver 1.1

太欣半導體股份有限公司
SYNTEK SEMICONDUCTOR CO., LTD.

10F, No. 1, Alley 30, Lane 358, Rui-Guang Road, Neihu, Taipei, Taiwan

1. KP2313 硬體說明
2. STK USB ISP Tool 安裝說明
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4. STK USB ISP Tool 操作環境介面說明
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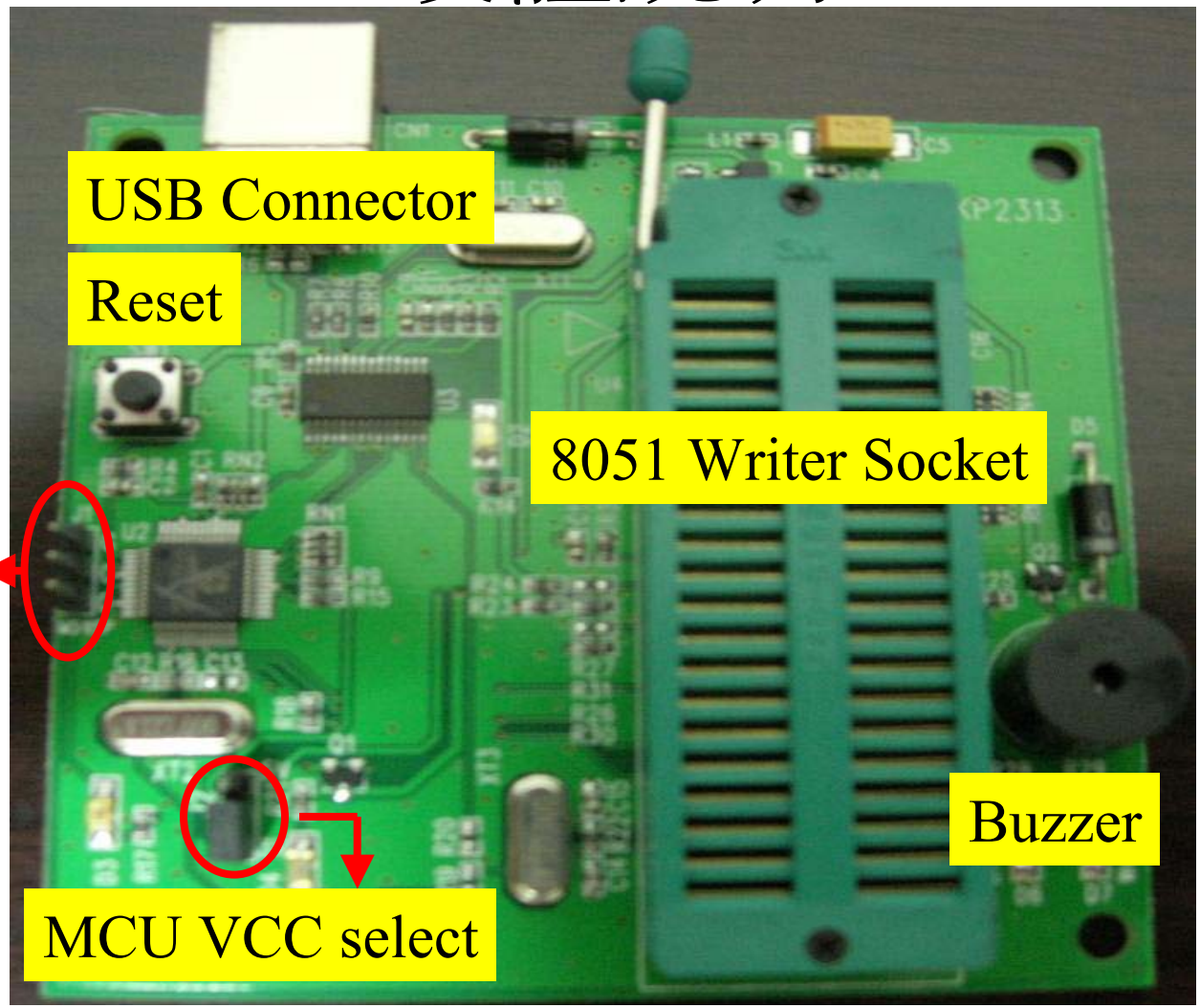
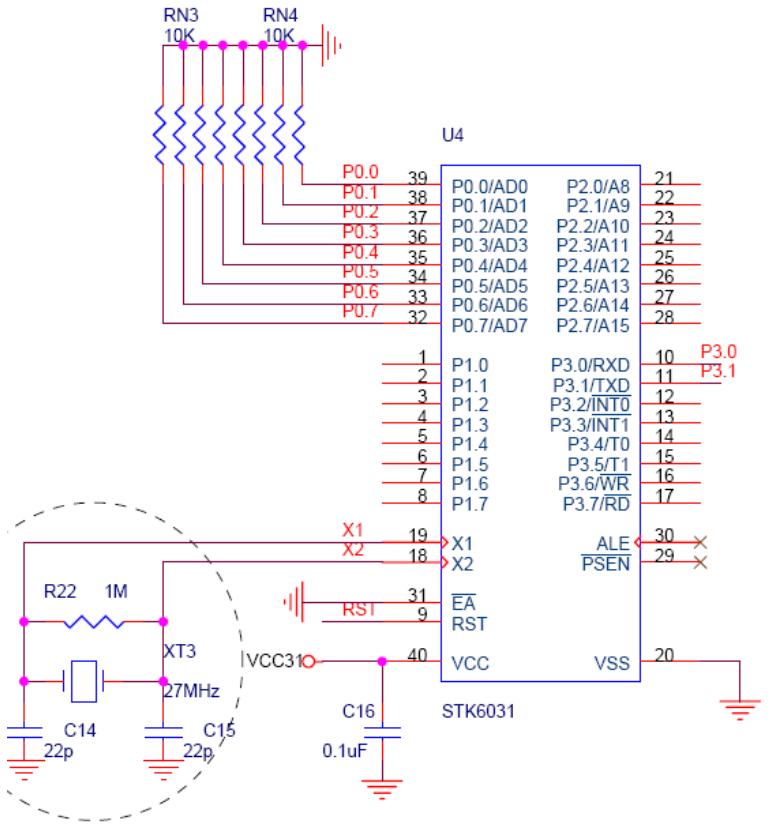
# KP2313 硬體說明


USB Connector
Reset
8051 Writer Socket
ISP connector
G : GND
C : P3.1 Rx
D : P3.0 Tx
Buzzer
MCU VCC select

# 轉接座接腳說明



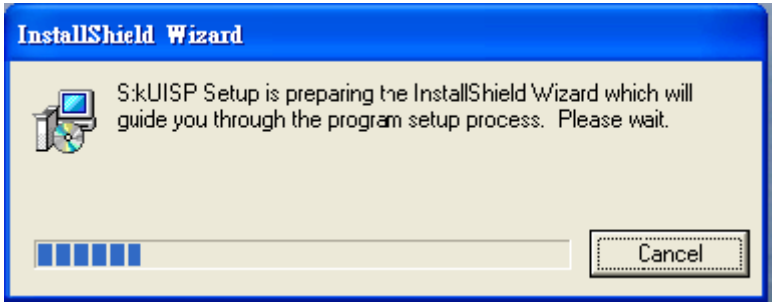

U4 的腳座定義
爲標準的 8051 DIP 40 pin 接腳

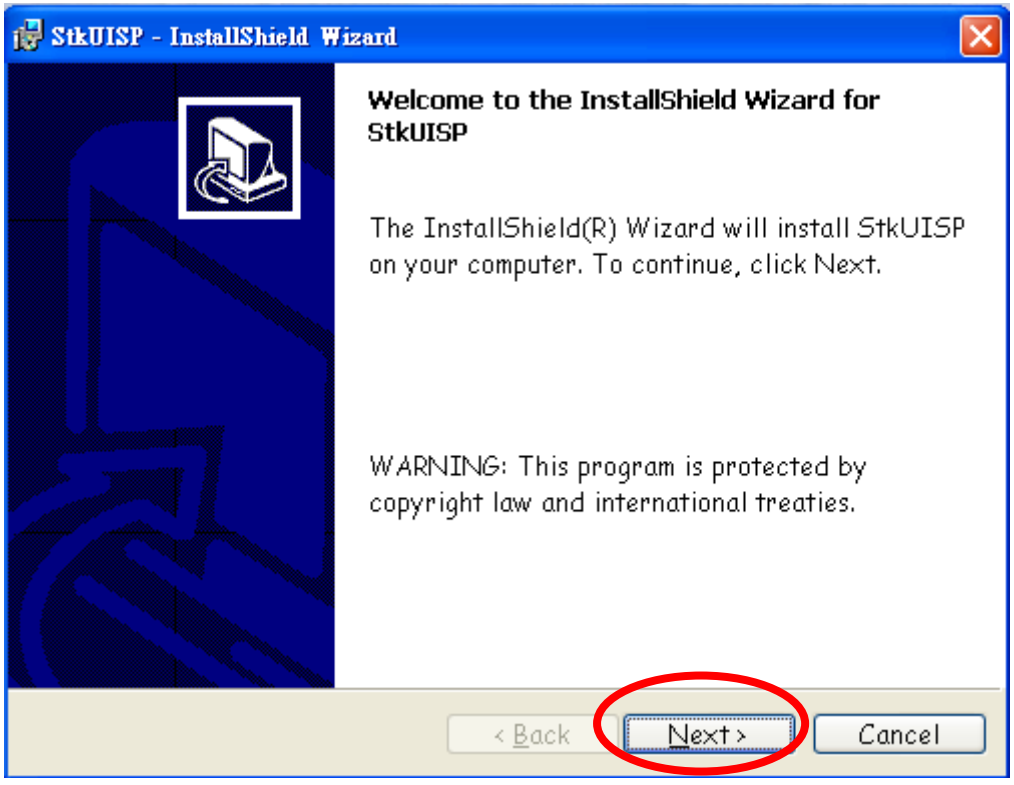
燒錄的轉接座接腳 , 請直接參考 P5 的 table

| | Standard 8051 (U4) | STK603X PLCC | STK603X QFP | STK603X LQFP |
|---|---|---|---|---|
| P0 | Pin 32 ~ 39 | Pin 36 ~ 43 | Pin 30 ~ 37 | Pin 32 ~35 , 37 ~ 40 |
| X1 | Pin 19 | Pin 21 | Pin 15 | Pin 16 |
| X2 | Pin 18 | Pin 20 | Pin 14 | Pin 15 |
| /EA | Pin 31 | Pin 35 | Pin 29 | Pin 31 |
| Reset | Pin 9 | Pin 10 | Pin 4 | Pin 4 |
| VCC | Pin 40 | Pin 44 | Pin 38 | Pin 41 |
| VSS | Pin 20 | Pin 22 | Pin 16 | Pin 17 |
| P3.0 | Pin 10 | Pin 11 | Pin 5 | Pin 5 |
| P3.1 | Pin 11 | Pin 13 | Pin 7 | Pin 7 |

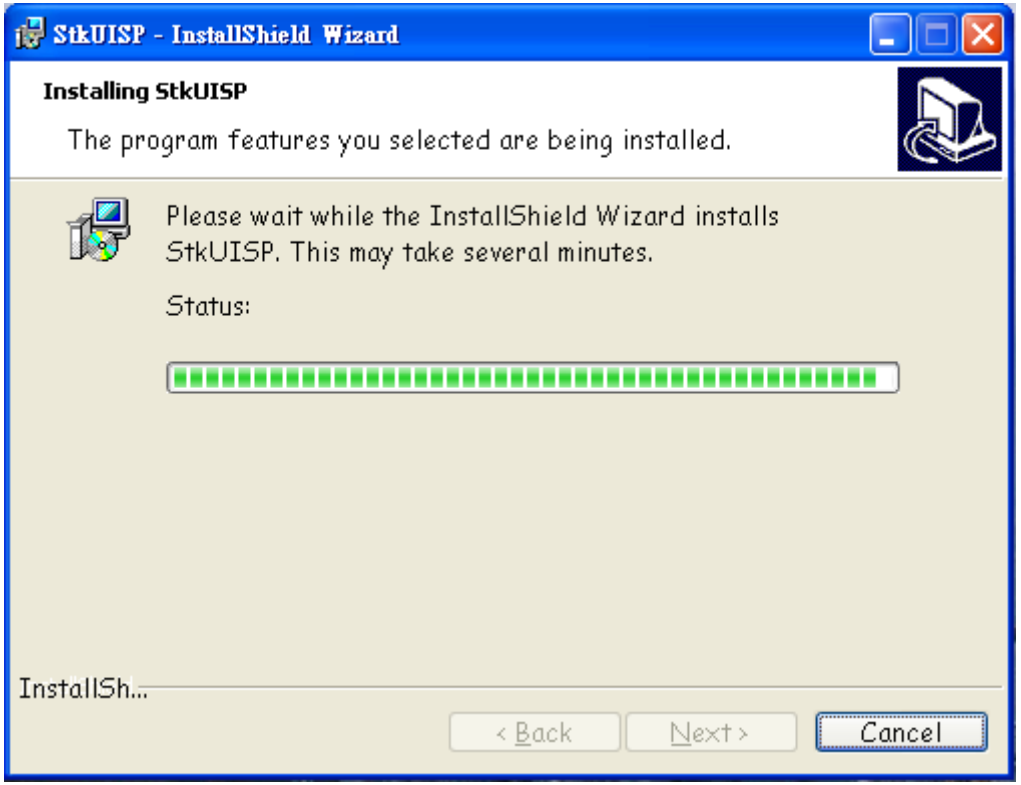
# STK USB ISP Tool 安裝

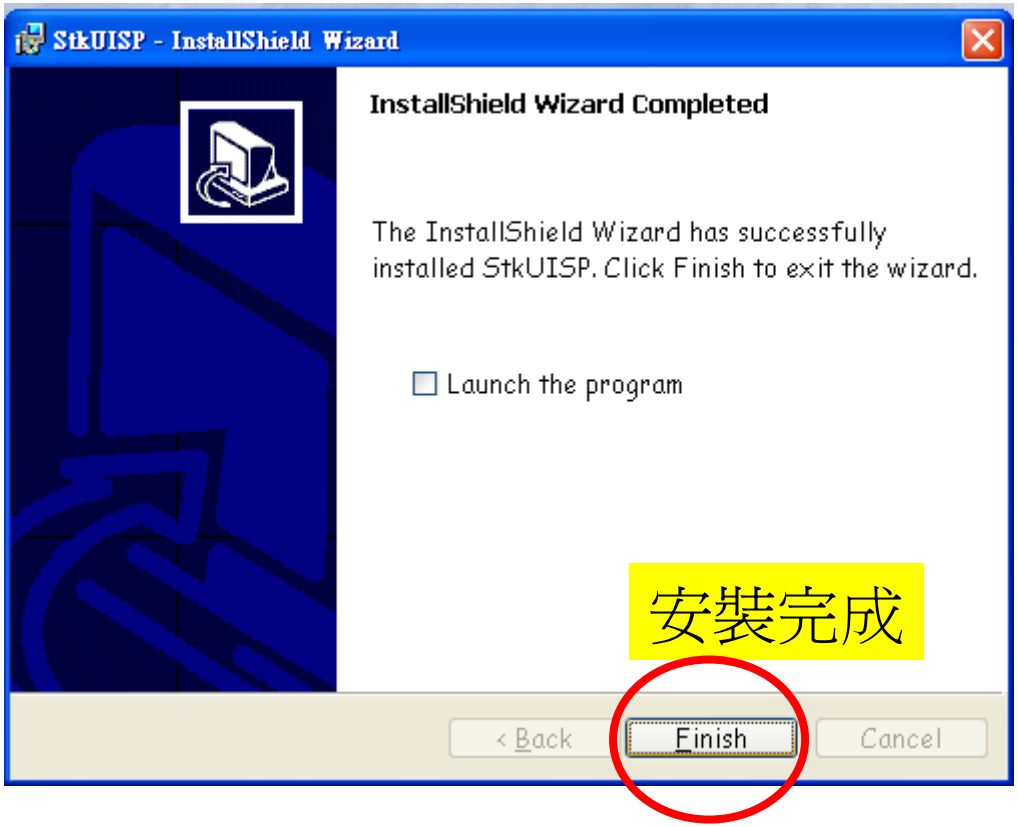
1. 點擊 setupvV11.EXE , 開始安裝 STK USB ISP Tool


InstallShield Wizard
S:kUISP Setup is preparing the InstallShield Wizard which will guide you through the program setup process. Please wait.
Cancel

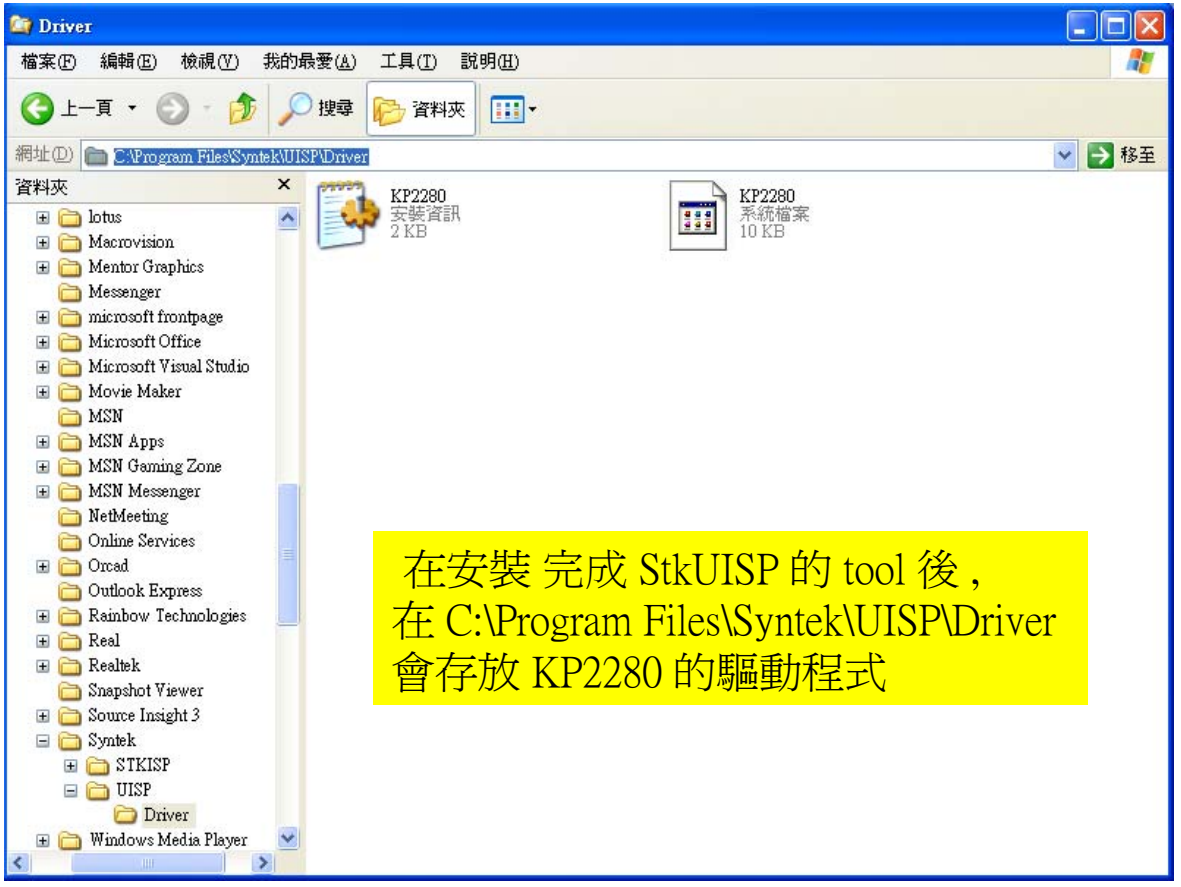

StkUISP - InstallShield Wizard
Welcome to the InstallShield Wizard for StkUISP
The InstallShield(R) Wizard will install StkUISP on your computer. To continue, click Next.
WARNING: This program is protected by copyright law and international treaties.
< Back
Next >
Cancel

滑鼠游標點擊 Next


StkUISP - InstallShield Wizard
Installing StkUISP
The program features you selected are being installed.
Please wait while the InstallShield Wizard installs StkUISP. This may take several minutes.
Status:
InstallSh...
< Back
Next >
Cancel

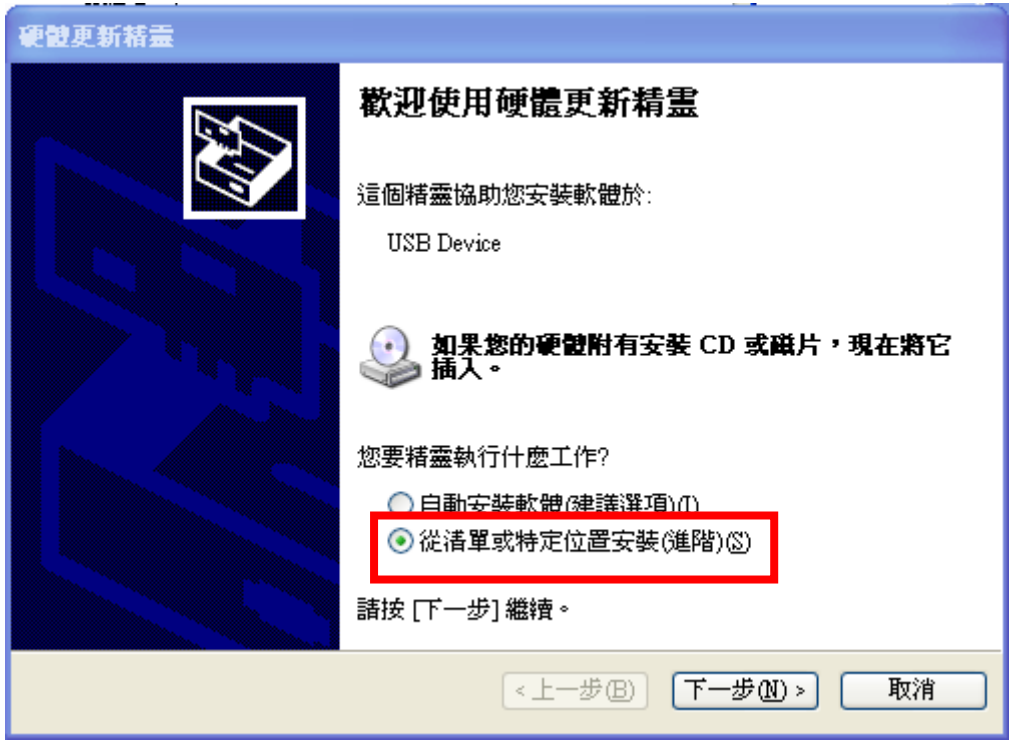

StkUISP - InstallShield Wizard
InstallShield Wizard Completed
The InstallShield Wizard has successfully installed StkUISP. Click Finish to exit the wizard.
Launch the program
安裝完成
< Back
Finish
Cancel

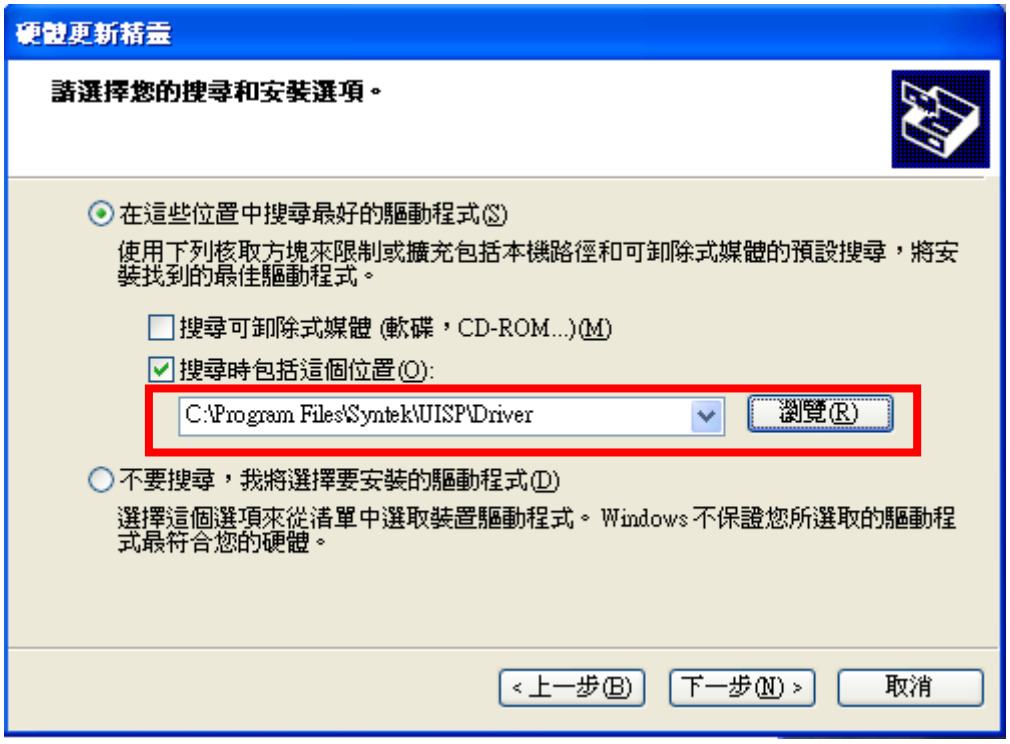
# 安裝 KP2280 驅動程式



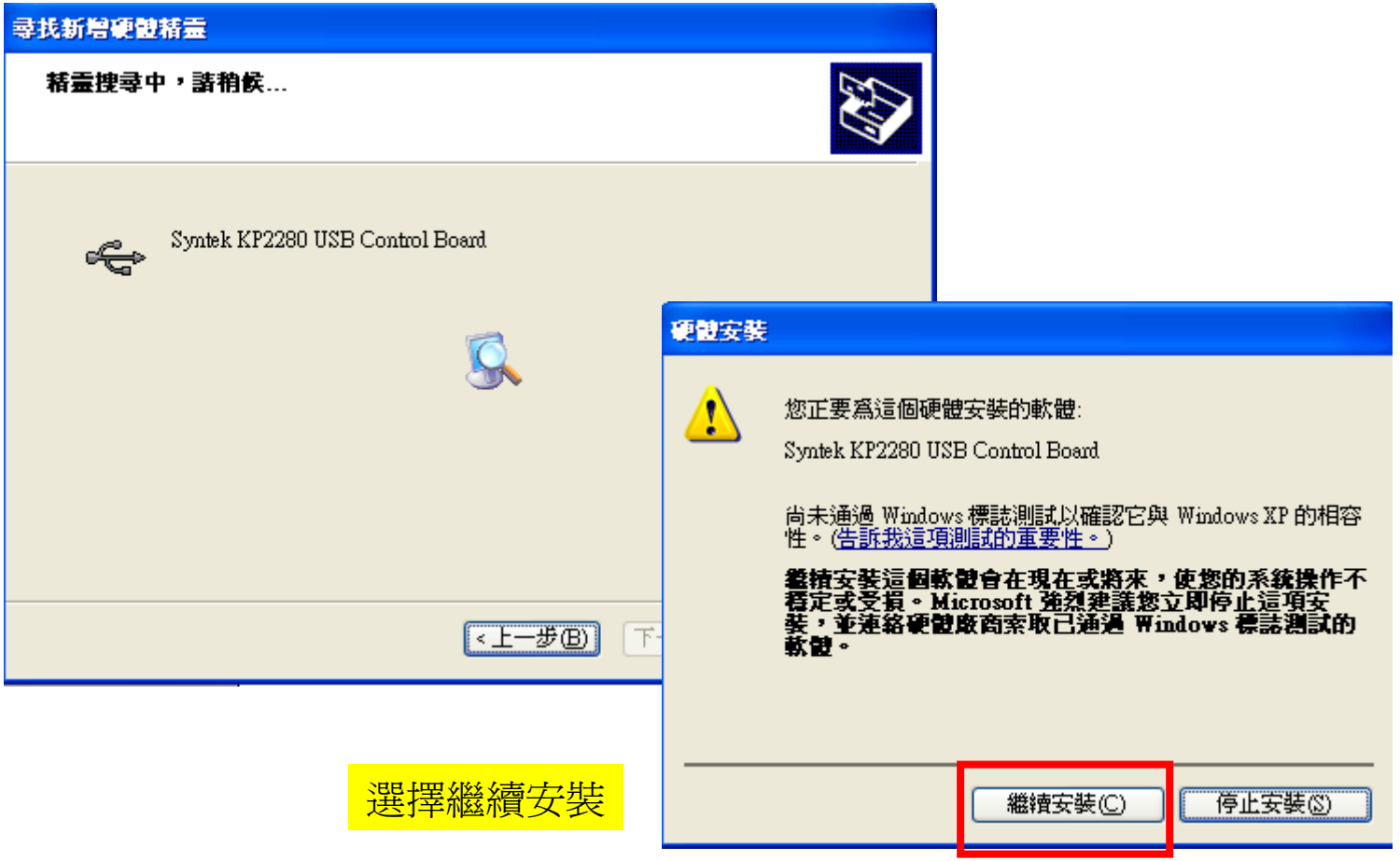

在安裝 完成 StkUISP 的 tool 後 ,
在 C:\Program Files\Syntek\UISP\Driver
會存放 KP2280 的驅動程式

將 KP2280 和電腦連接
開始安裝驅動程式





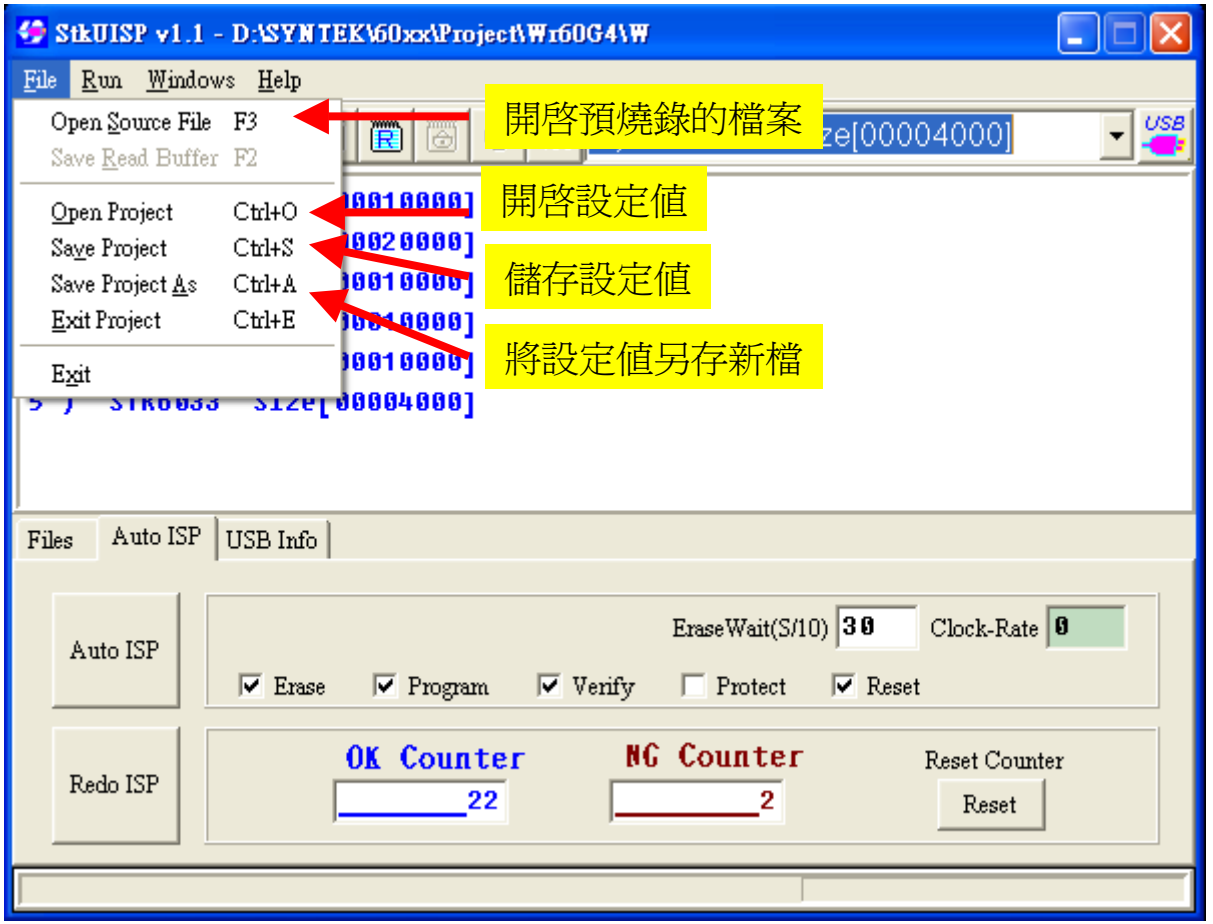

將路徑選擇 C:\Program Files\Syntek\UISP\Driver


尋找新增硬體精靈
精靈搜尋中，請稍候...
Syntek KP2280 USB Control Board
< 上一步(B)
硬體安裝
您正要爲這個硬體安裝的軟體:
Syntek KP2280 USB Control Board
尚未通過 Windows 標誌測試以確認它與 Windows XP 的相容性。(告訴我這項測試的重要性。)
繼續安裝這個軟體會在現在或將來，使您的系統操作不穩定或受損。Microsoft 強烈建議您立即停止這項安裝，並連絡硬體廠商索取已通過 Windows 標誌測試的軟體。
繼續安裝(C)
停止安裝(S)

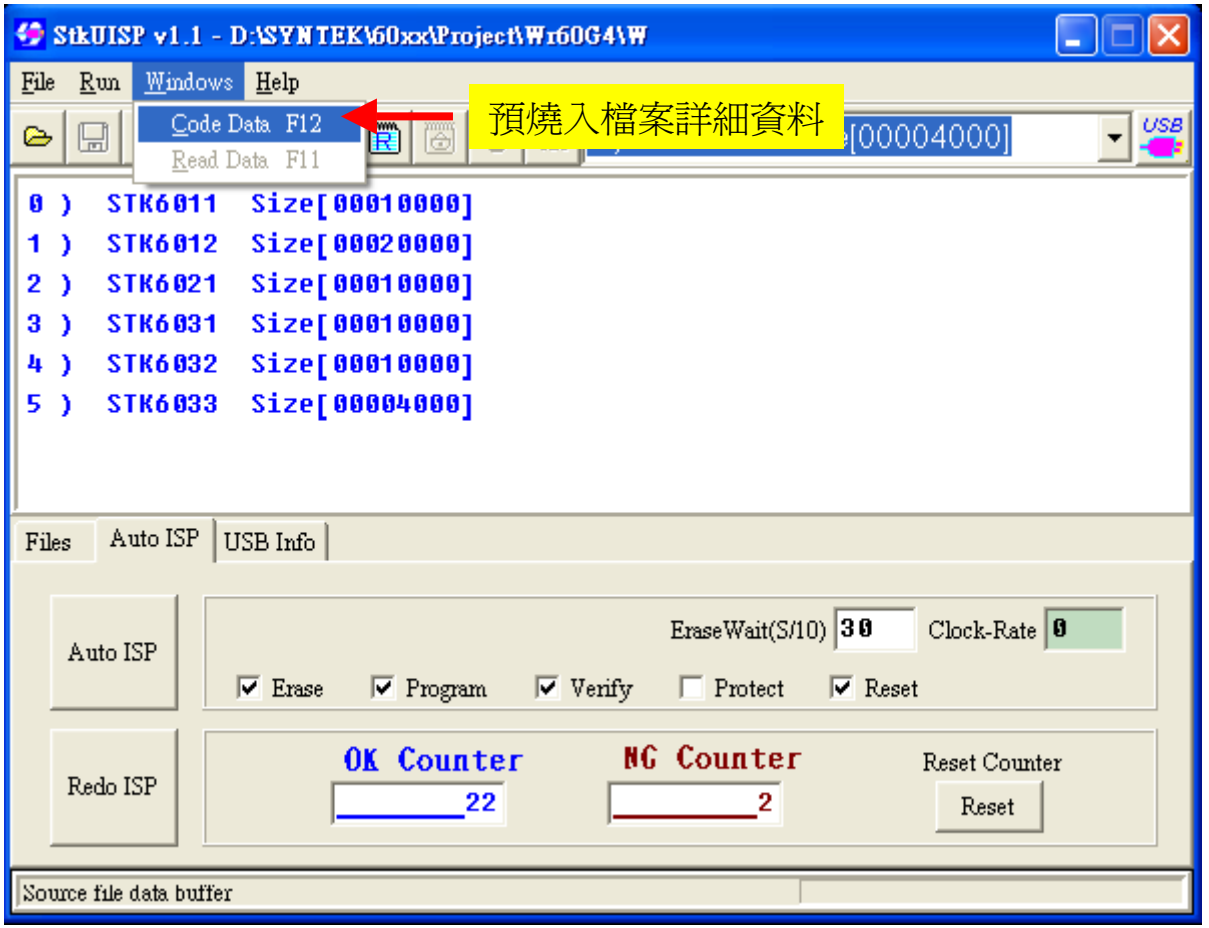
選擇繼續安裝

尋找新增硬體精靈
完成尋找新增硬體精靈
這個精靈安裝了軟體於:
Syntek KP2280 USB Control Board
按 [完成] 關閉精靈。
< 上一步(B)
完成
取消

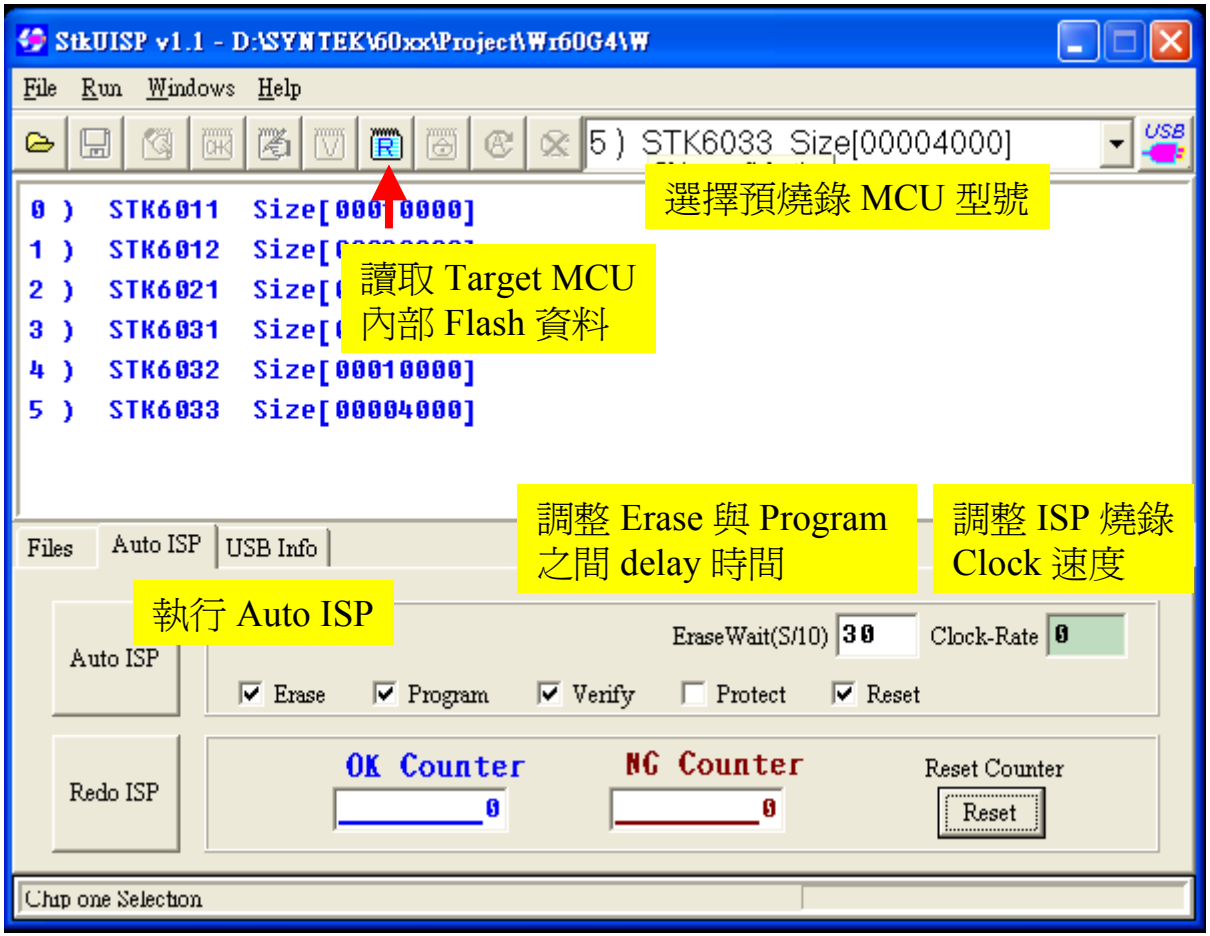
# StkUISP 設定 (1)


StkUISP v1.1 - D:\SYNTEK\60xx\Project\Wr60G4\W
File
Run
Windows
Help
Open Source File F3
Save Read Buffer F2
Open Project Ctrl+O
Save Project Ctrl+S
Save Project As Ctrl+A
Exit Project Ctrl+E
Exit
開啓預燒錄的檔案
開啓設定值
儲存設定值
將設定值另存新檔
Files
Auto ISP
USB Info
Auto ISP
EraseWait(S/10) 30
Clock-Rate 0
Erase
Program
Verify
Protect
Reset
Redo ISP
OK Counter
22
NG Counter
2
Reset Counter
Reset

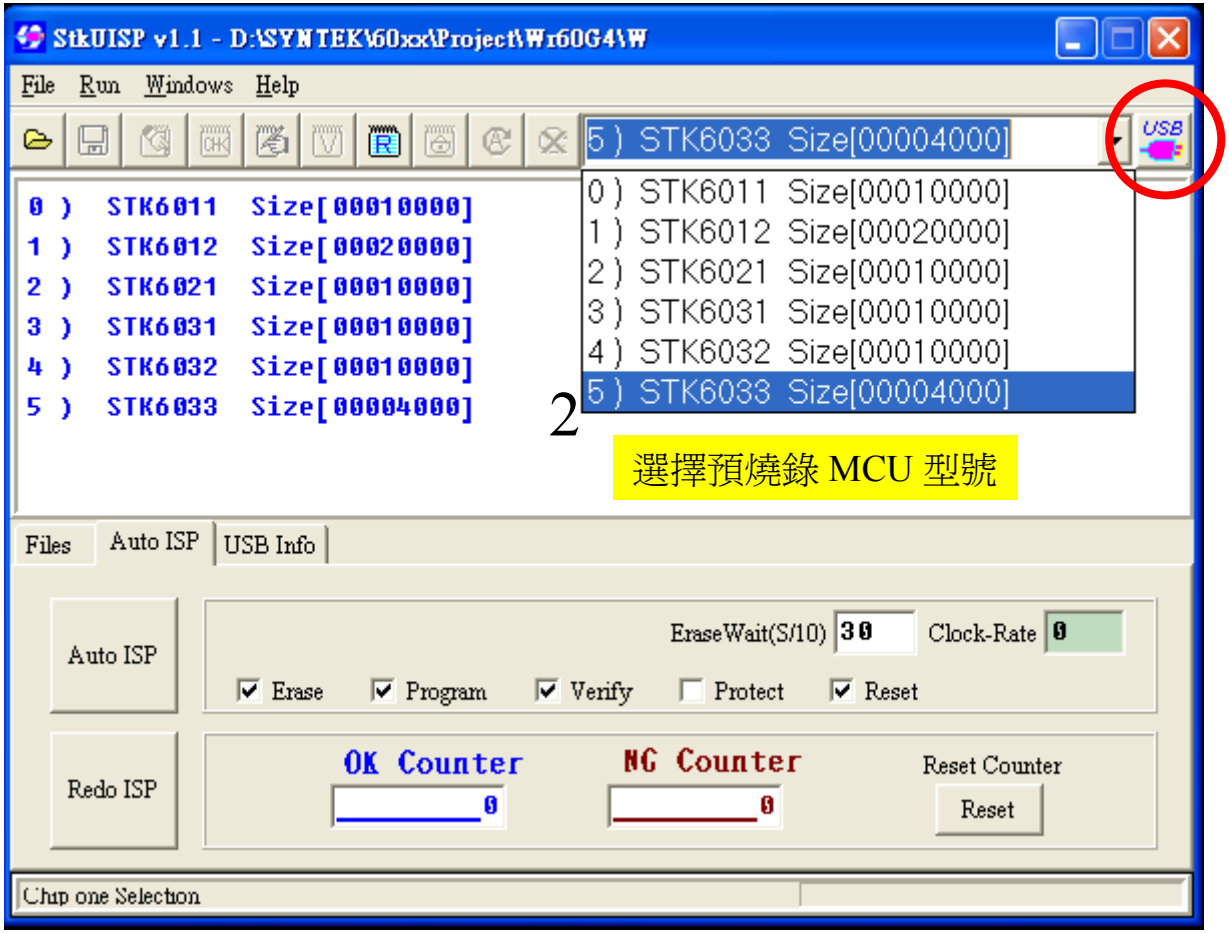
# StkUISP 設定 (2)


StkUISP v1.1 - D:\SYNTEK\60xx\Project\Wr60G4\W
File
Run
Windows
Help
Code Data F12
Read Data F11
預燒入檔案詳細資料
[00004000]
USB
0 ) STK6011 Size[00010000]
1 ) STK6012 Size[00020000]
2 ) STK6021 Size[00010000]
3 ) STK6031 Size[00010000]
4 ) STK6032 Size[00010000]
5 ) STK6033 Size[00004000]
Files
Auto ISP
USB Info
Auto ISP
EraseWait(S/10) 30
Clock-Rate 0
Erase
Program
Verify
Protect
Reset
Redo ISP
OK Counter
22
NG Counter
2
Reset Counter
Reset
Source file data buffer

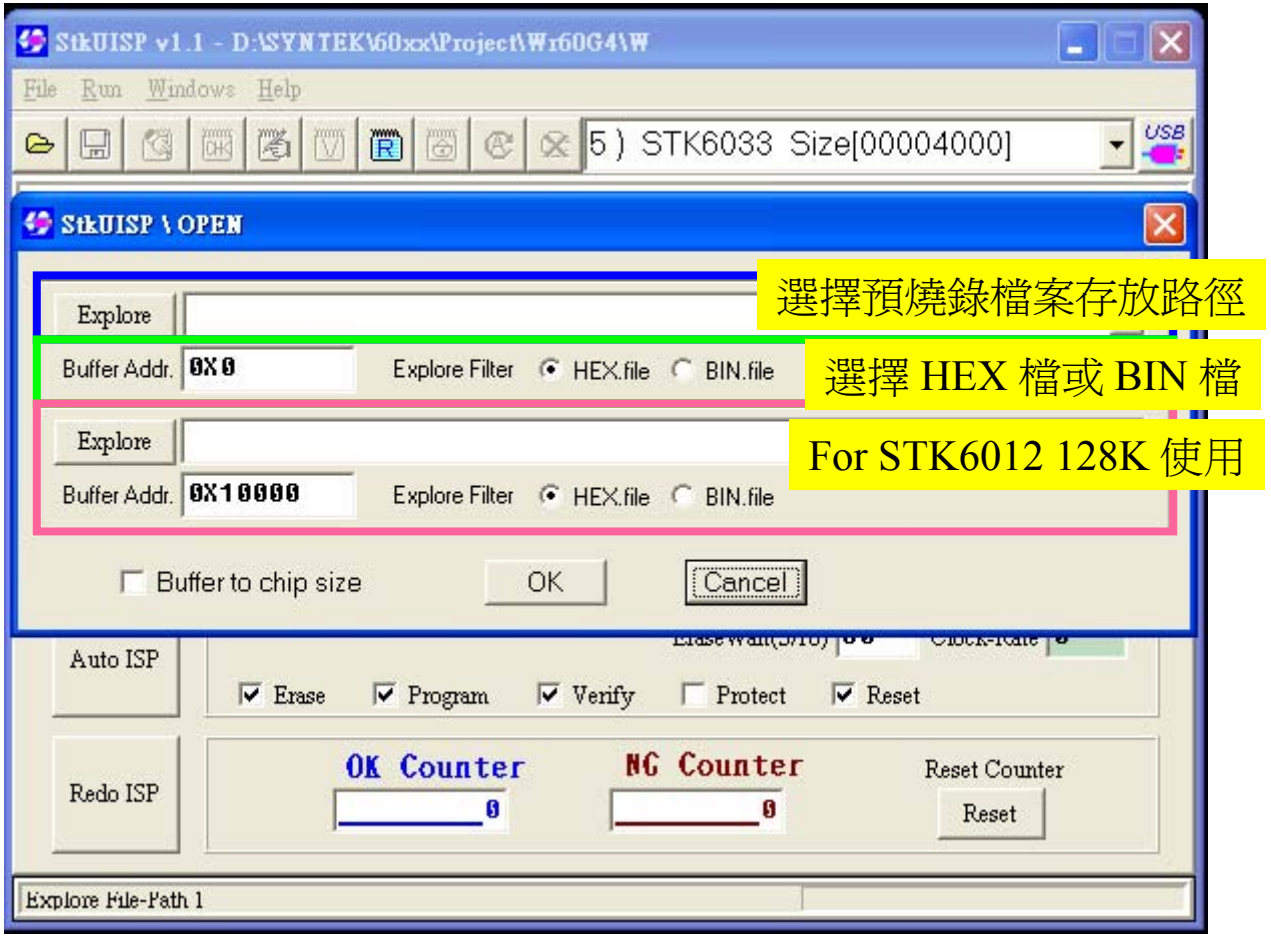
# StkUISP 設定 (3)


StkUISP v1.1 - D:\SYNTEK\60xx\Project\Wr60G4\W
File Run Windows Help
5 ) STK6033 Size[00004000]
USB
選擇預燒錄 MCU 型號
讀取 Target MCU 內部 Flash 資料
0 ) STK6011 Size[0000 0000]
1 ) STK6012 Size[
2 ) STK6021 Size[
3 ) STK6031 Size[
4 ) STK6032 Size[00010000]
5 ) STK6033 Size[00004000]
調整 Erase 與 Program 之間 delay 時間
調整 ISP 燒錄 Clock 速度
Files
Auto ISP
USB Info
執行 Auto ISP
Auto ISP
EraseWait(S/10) 30
Clock-Rate 0
Erase
Program
Verify
Protect
Reset
Redo ISP
OK Counter
0
NG Counter
0
Reset Counter
Reset
Chip one Selection

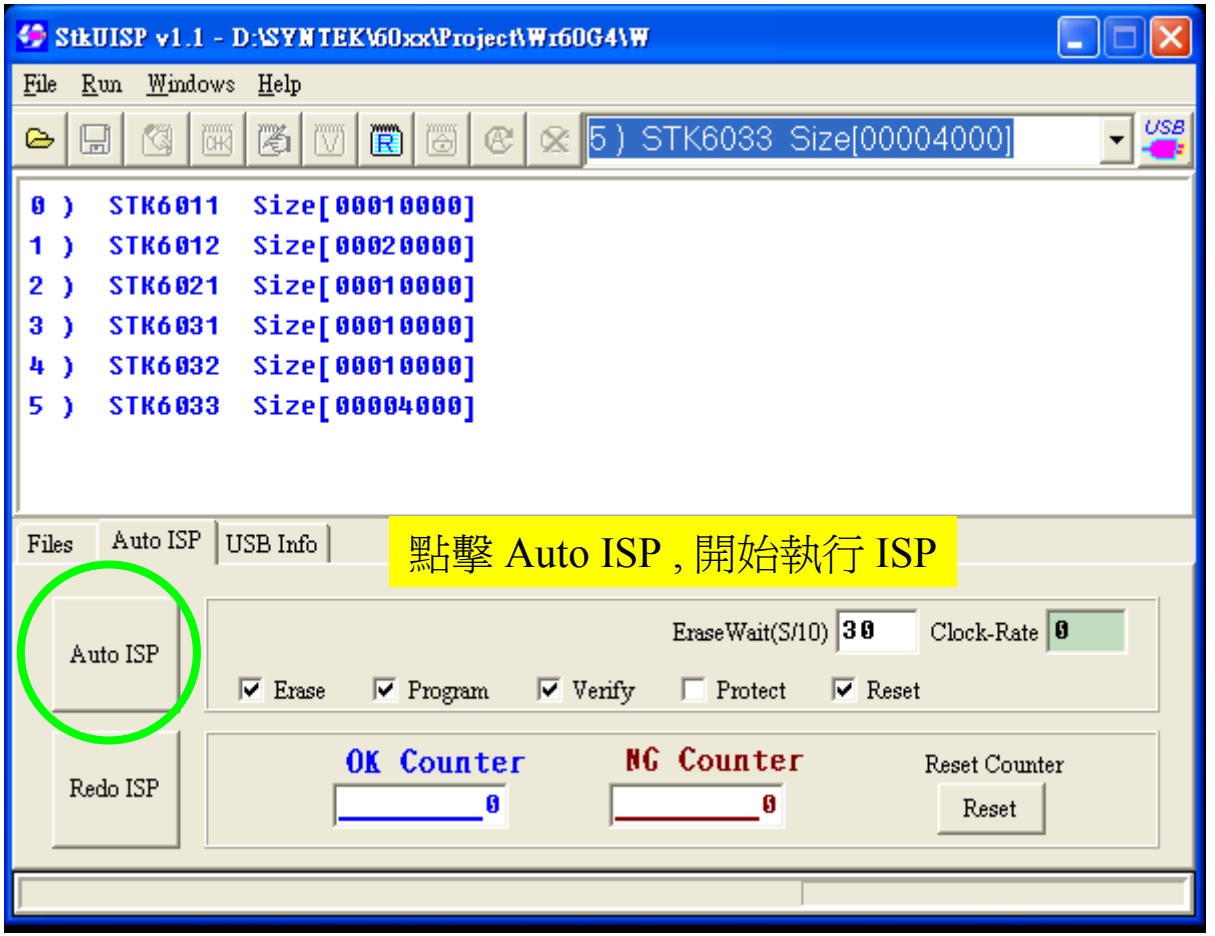
# ISP執行步驟說明


StkUISP v1.1 - D:\SYNTEK\60xx\Project\Wr60G4\W
File Run Windows Help
USB
5 ) STK6033 Size[00004000]
0 ) STK6011 Size[00010000]
1 ) STK6012 Size[00020000]
2 ) STK6021 Size[00010000]
3 ) STK6031 Size[00010000]
4 ) STK6032 Size[00010000]
5 ) STK6033 Size[00004000]
1
2
選擇預燒錄 MCU 型號
Files
Auto ISP
USB Info
Auto ISP
EraseWait(S/10) 30
Clock-Rate 0
Erase
Program
Verify
Protect
Reset
Redo ISP
OK Counter
0
NG Counter
0
Reset Counter
Reset
Chip one Selection

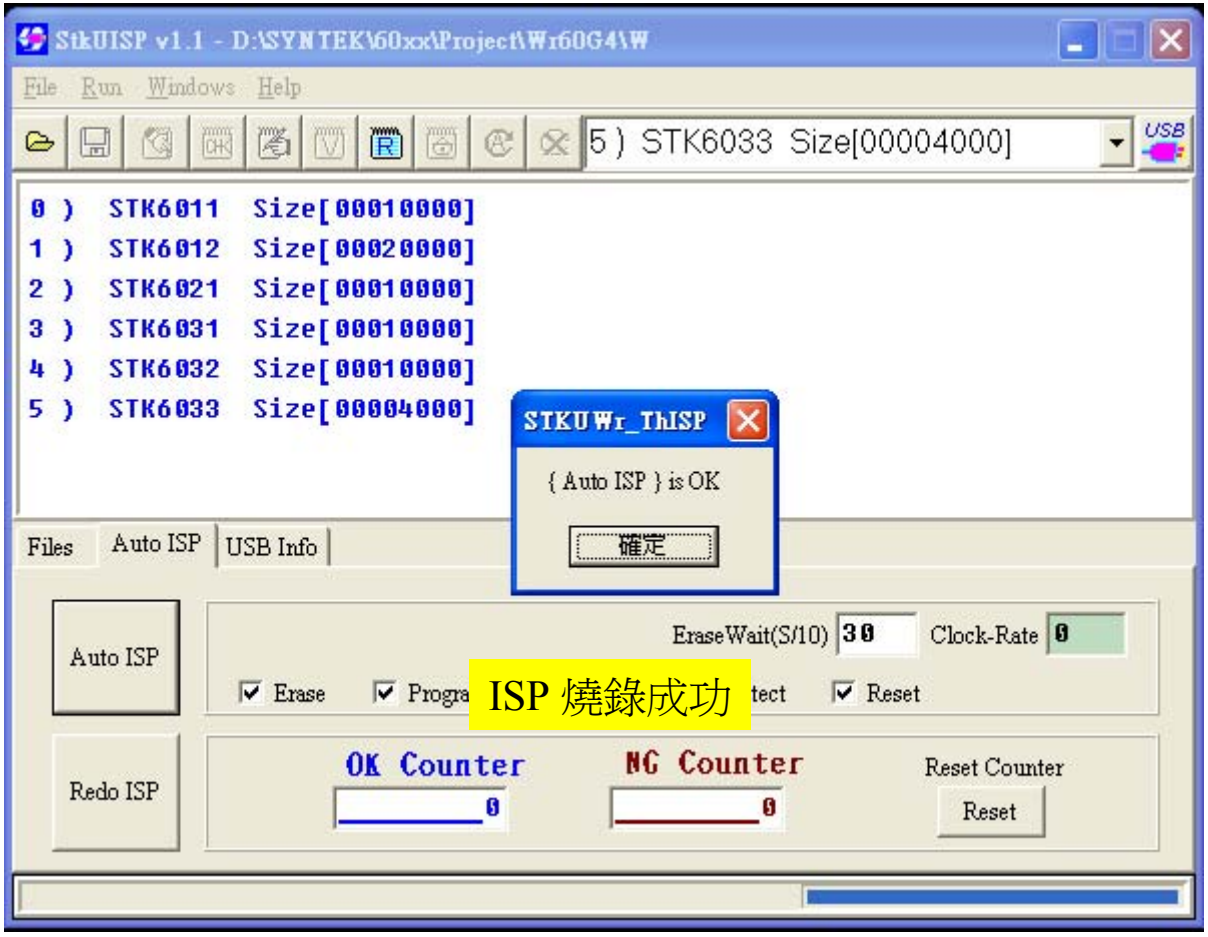
# 選擇燒錄的檔案


StkUISP v1.1 - D:\SYNTEK\60xx\Project\Wr60G4\W
File Run Windows Help
5 ) STK6033 Size[00004000]
USB
StkUISP \ OPEN
Explore
Buffer Addr. 0X0
Explore Filter HEX.file BIN.file
Explore
Buffer Addr. 0X10000
Explore Filter HEX.file BIN.file
Buffer to chip size
OK
Cancel
Auto ISP
Erase Program Verify Protect Reset
Redo ISP
OK Counter
0
NG Counter
0
Reset Counter
Reset
Explore File-Path 1
選擇預燒錄檔案存放路徑
選擇 HEX 檔或 BIN 檔
For STK6012 128K 使用

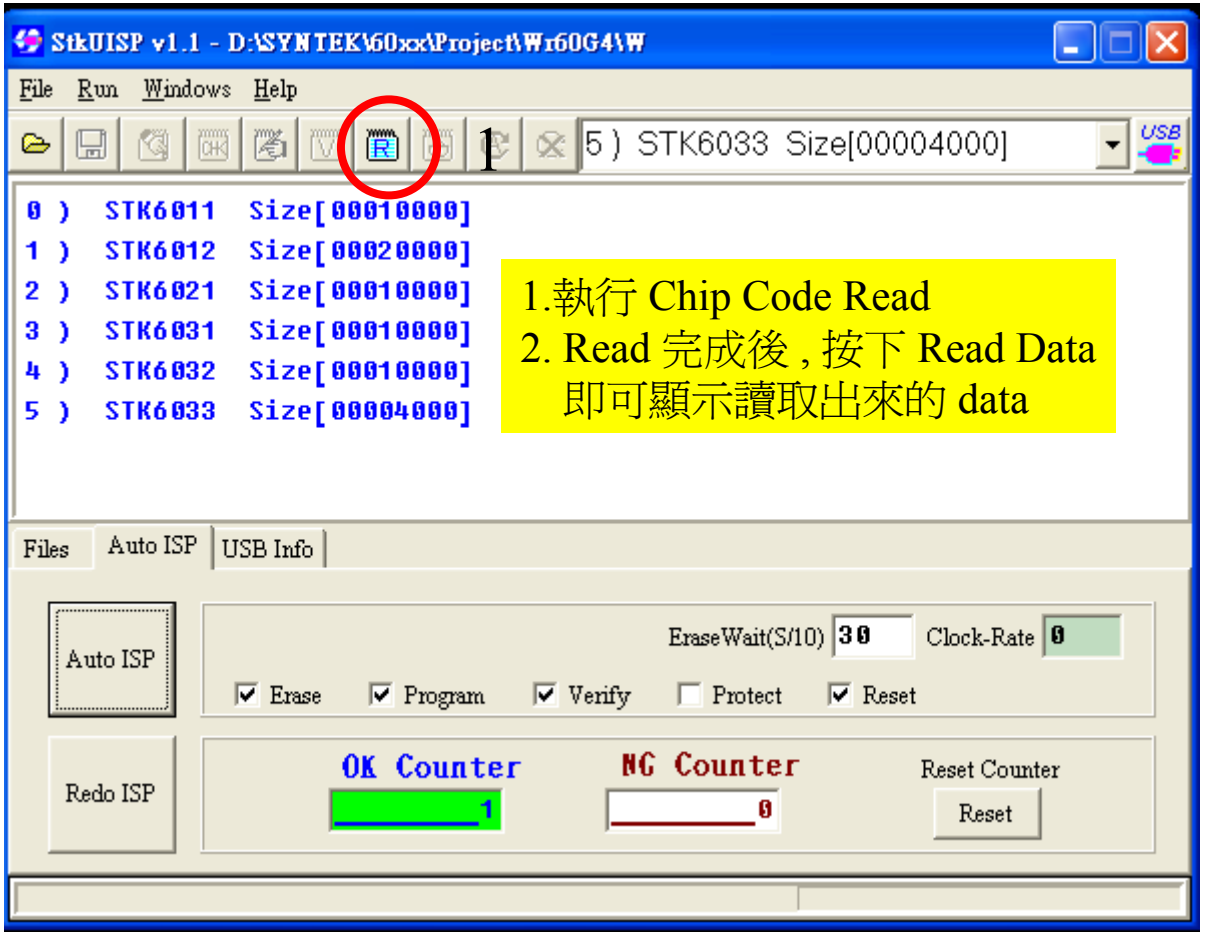
# 執行 ISP 燒錄


StkUISP v1.1 - D:\SYNTEK\60xx\Project\Wr60G4\W
File Run Windows Help
5 ) STK6033 Size[00004000]
USB
0 ) STK6011 Size[00010000]
1 ) STK6012 Size[00020000]
2 ) STK6021 Size[00010000]
3 ) STK6031 Size[00010000]
4 ) STK6032 Size[00010000]
5 ) STK6033 Size[00004000]
Files
Auto ISP
USB Info
點擊 Auto ISP , 開始執行 ISP
Auto ISP
Redo ISP
EraseWait(S/10) 30
Clock-Rate 0
Erase
Program
Verify
Protect
Reset
OK Counter
0
NG Counter
0
Reset Counter
Reset

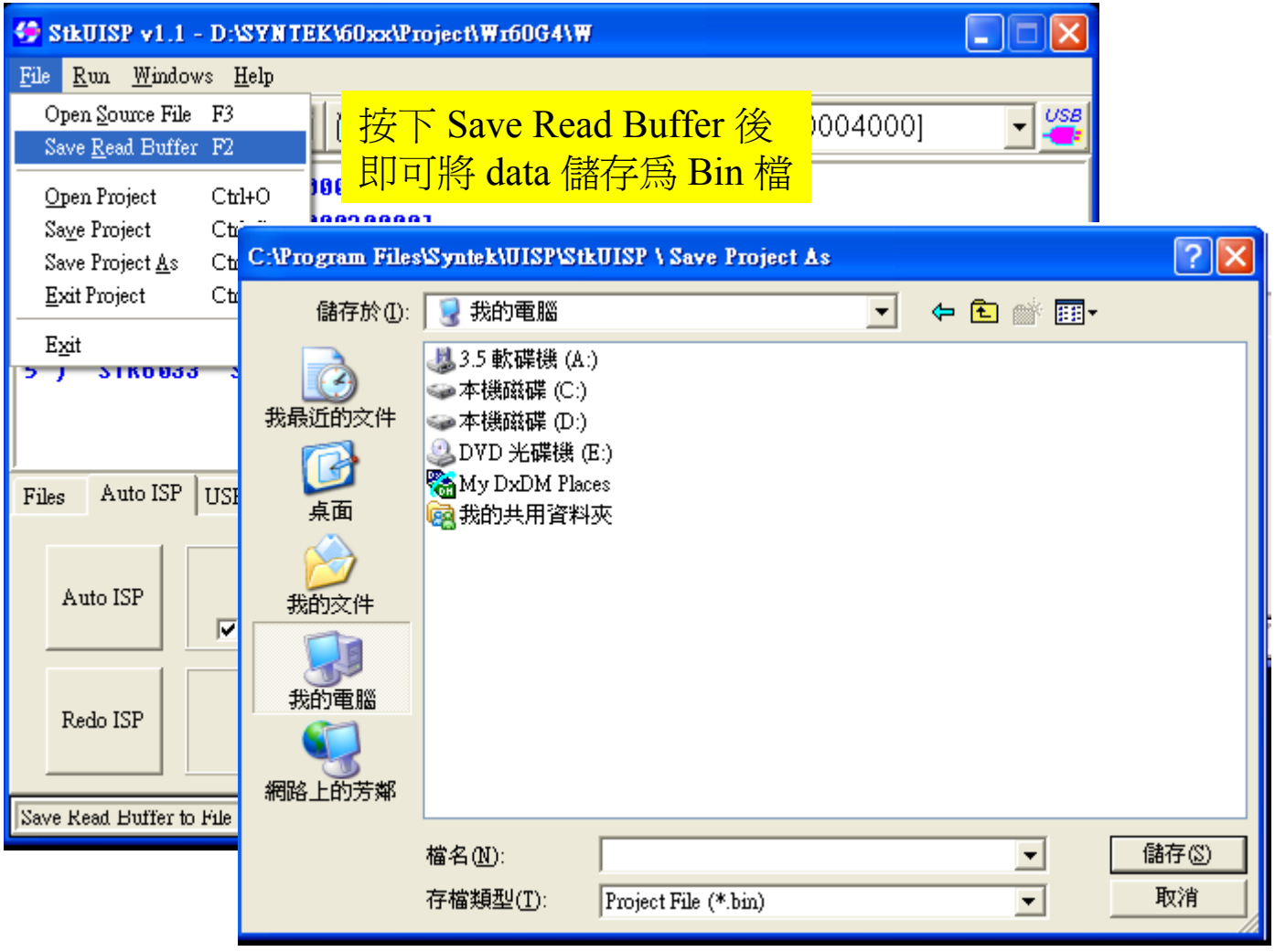
StkUISP v1.1 - D:\SYNTEK\60xx\Project\Wr60G4\W
File Run Windows Help
5 ) STK6033 Size[00004000]
USB
0 ) STK6011 Size[00010000]
1 ) STK6012 Size[00020000]
2 ) STK6021 Size[00010000]
3 ) STK6031 Size[00010000]
4 ) STK6032 Size[00010000]
5 ) STK6033 Size[00004000]
Files
Auto ISP
USB Info
ISP 燒錄執行中
Auto ISP
EraseWait(S/10) 30
Clock-Rate 0
Erase
Program
Verify
Protect
Reset
Redo ISP
OK Counter
0
NG Counter
0
Reset Counter
Reset


StkUISP v1.1 - D:\SYNTEK\60xx\Project\Wr60G4\W
File Run Windows Help
5 ) STK6033 Size[00004000]
USB
0 ) STK6011 Size[00010000]
1 ) STK6012 Size[00020000]
2 ) STK6021 Size[00010000]
3 ) STK6031 Size[00010000]
4 ) STK6032 Size[00010000]
5 ) STK6033 Size[00004000]
STKUWr_ThISP
{ Auto ISP } is OK
確定
Files
Auto ISP
USB Info
Auto ISP
EraseWait(S/10) 30
Clock-Rate 0
Erase
Reset
ISP 燒錄成功
Redo ISP
OK Counter
0
NG Counter
0
Reset Counter
Reset

# 讀取 Target MCU Flash



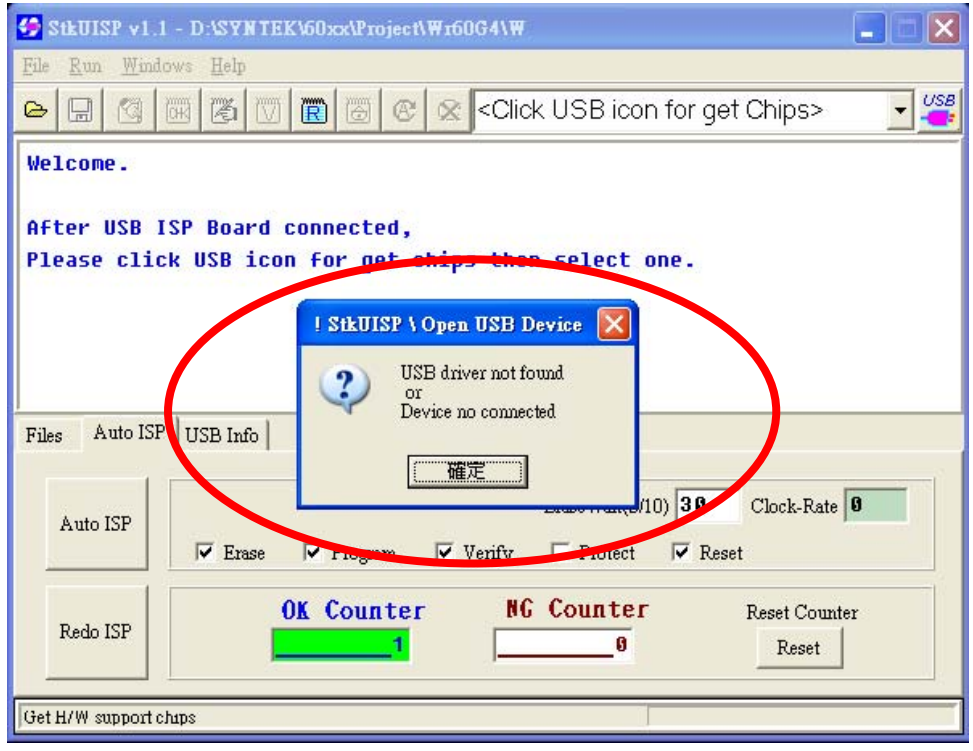
# 儲存 Target MCU Flash 資料



# Q & A

Q1 :
點擊右上角的 USB Icon 後 ,
爲何無法選擇所支援的 MCU 型號 ?

A :
請先確認 KP2313 USB ISP Writer
是否連接到 PC .

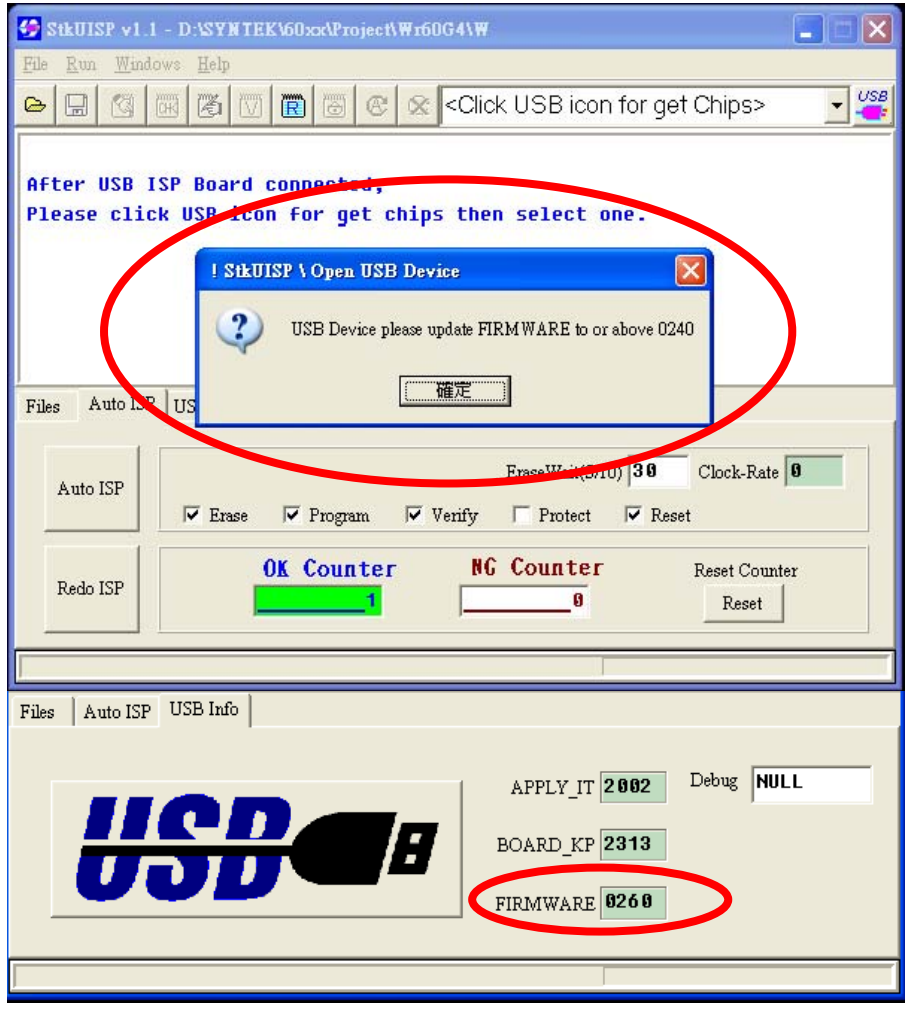


# Q2 :

KP2313 已連接到 PC ,
爲何出現圖片中的對話框 ?

# A :

StkUISP V1.0 支援的韌體版本
爲 0240 以上 , 請更新 KP2313 的韌體
版本可由 USB Info 中確認.



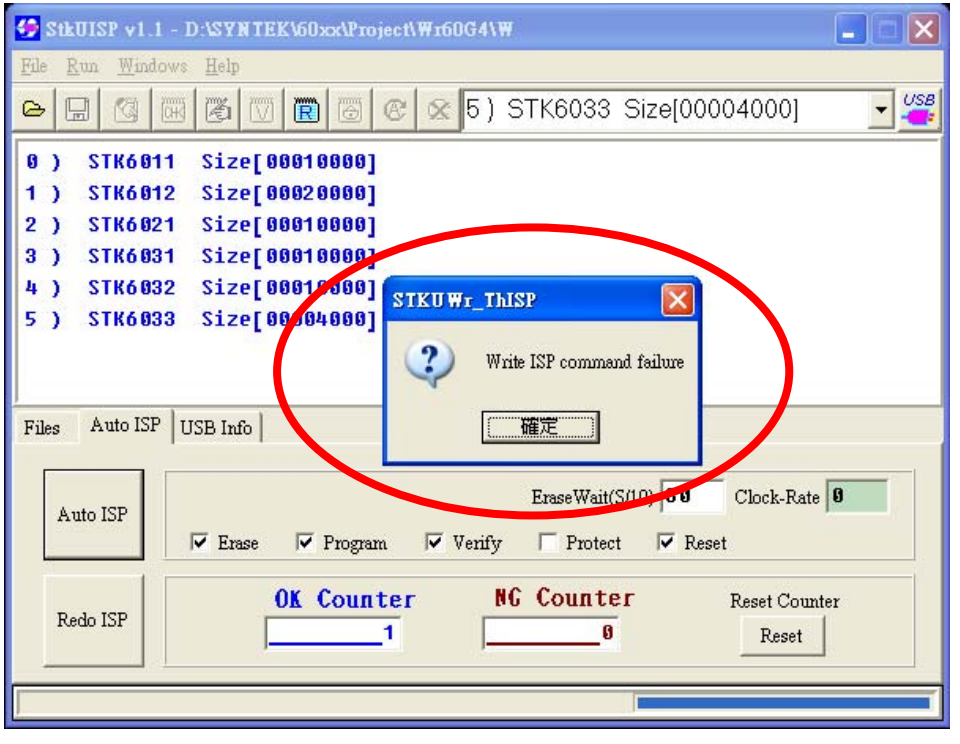
# Q3 :

爲何無法執行 Auto ISP ?

# A :

這是因爲 ISP Trigger 失敗.

1. 請確認 Crystal 是否振盪 ?
2. 請確認 Reset 是否爲 Low ?
3. 請確認 MCU P3.0 和 P3.1 連接到 KP2313 是正確的
4. 請將 Clock-Rate 調慢 , 0 爲最快 數字越大 Clock 越慢
5. STK6032及STK6033請確認 KP2313上的 J2 Jumper 是否跳爲 5V

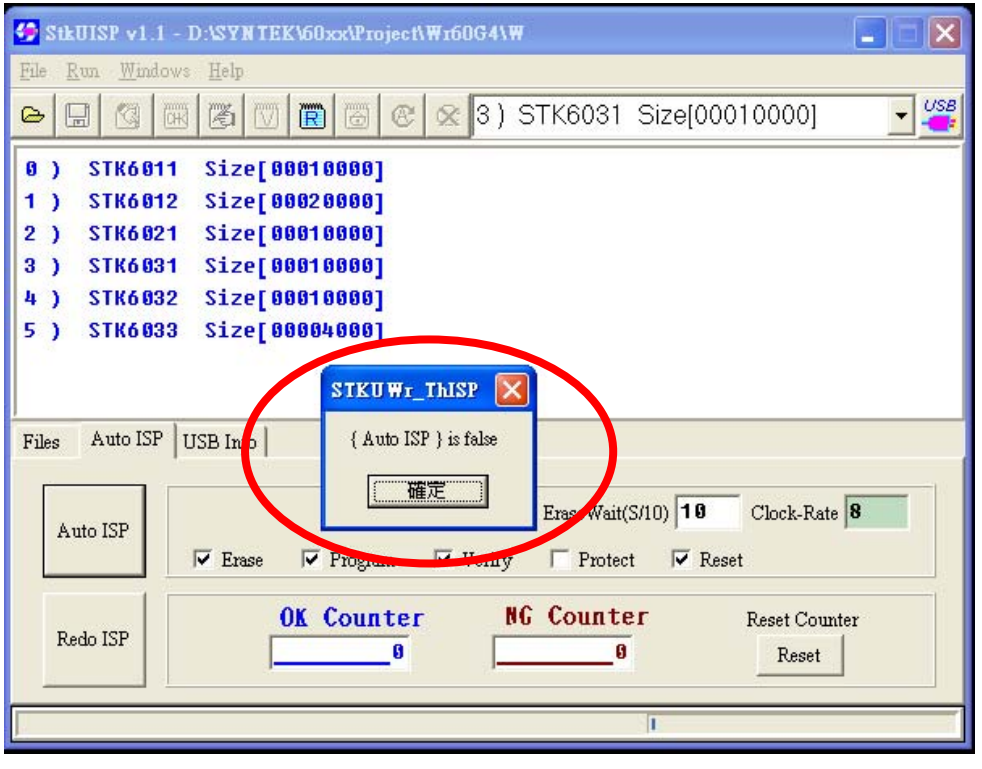


# Q4 :

STK6031 執行 Auto ISP 失敗 , 出現圖中的對話框

# A :

請調整 Erase Wait 的 delay 時間 , 請把數值再往上調整 , 增加 Erase 跟 Programming 之間的 delay 時間



# Q5 :

STK6033 載入預燒入檔案時 , 出現圖中的對話框

# A :

STK6033 的 Flash 爲 16K bytes , 當檔案超過時 , 便會出現圖中的錯誤訊息